**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Designing a website solution, p 66**

**Problem-solving Methodology: 4 Stages**

**Analyse**

**Design**

**Development**

**Evaluate**

**Case Study:**

**Indigenous Language Trust, (ILT)**

Using the case study, ILT complete the following:

**Designing a website solution, p 66**

1. List the techniques that web developers can use to ensure their website is efficient?

* Reduce the time spent making pages by creating templates and using CSS sheets
* Reduce the time spent waiting for a page to load
* Ensure that all images are in a smaller format or use thumbnails so that the page will load with minimal effort

1. List the techniques that web developers can use to ensure their website is effective?

* Check to see the website loads correctly in different web browsers
* Make the website easier for the user to navigate, this can be don’t through the use of things such as the use of links that change colour after they have been clicked on
* Keep the layout consistent throughout the whole website, this will make it easier for visitors and makes it clear and consistent
* Also the use of clear and consistent layouts will make it easier for the visually impaired, people with learning disabilities and those who have trouble using a disorganised navigation scheme to use
* Clearly displaying information on the website and keeping background images to a minimum will help people with colour blindness or impaired vision.

**Identifying how a solution will function**

Taking into account the technical constraints a range of design tools can be used to show the functionality of the website. Elaborate on each of the following functional design tools:

1. IPO Charts

An IPO, input— process—output, chart can be used to show how data is processed into meaningful information. It identifies what data is required for the solution (input), what information the solution needs to produce (output) and what processing occurs to turn the data into the information.

1. Flowcharts

A flowchart uses symbols in a linear sequence to document each procedural step required. It can be used to indicate how a member of an online community may gain access to the information or how a solution is produced.

1. Layout diagrams

Layout diagrams or style sheets are used to show how a webpage will function. They can answer questions such as, what happens if we click this link? Or what happens if we type in an account name and password?

1. Website map
   1. What does information architecture refer to?

Information architecture refers to the structure of the website, its navigation pathways and often communicated through a map. If a user cannot navigate the website they will often leave it quickly.

**Navigation Design**

1. What considerations need to be taken into planning the navigation design?

When planning the navigation design the placement of the navigation bar, and how this will affect the accessibility.

1. What’s meant by making your website accessible?

Website accessible is the use different versions of plug-ins that can be used, it is advisable to avoid using special effects created on software such as flash, java or JavaScript.

1. What is a style guide?

A style guide will tell you exactly how to format communication for that organisation.

1. List the conventions of file naming.

Index page is the first page, or home page, that appears as you open a website. Filenames should be short and meaningful.

**Identifying how a solution will appear using design tools, p 70**

**Elaborate on the following:**

1. Mock-up diagram

Is a sketch of the actual website that the designer is going to develop.

1. Layout diagrams

Layout diagrams provide a visual representation of how the final product should look.

1. Storyboard designs

A storyboard is tool used to design the features of each individual page.

**Formats and conventions,** p 73

Elaborate on the following formats and conventions

* Screen size

Length of a line of text should not be longer than 60 characters.

* Text

Alignment of text to the left.

Avoid using upper case other than in header.

* Navigation

In the left hand side.

* Font selection

Same font though out the web site (usually between 9 and 12 points).

* Images and file size

They are used for digital representation of information.

* Style guides

Bold or italic.